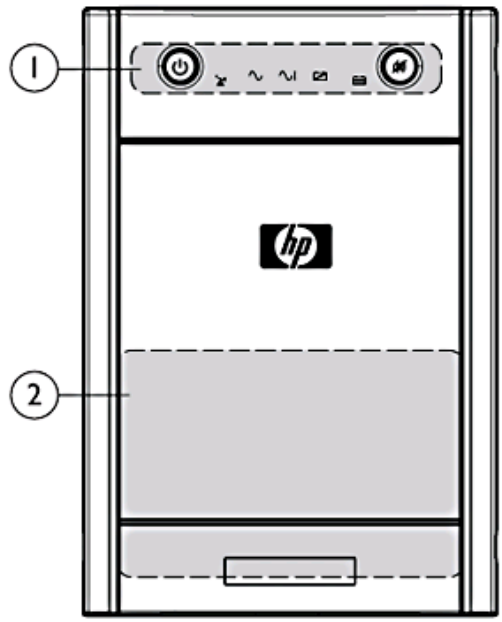
Overview

The Tower UPS "G2" models are the next generation HP tower UPSs with USB support. These new UPSs are designed to provide advanced power protection (or increased uptime and data corruption avoidance) for servers, storage, computer equipment, and network environments.

Key benefits include increased power rating, intuitive front panel display, Enhanced Battery Management (EBM), prioritized shut-down, and hot-swappable batteries. Bundled with HP Power Manager management software, these UPSs also feature a serial and USB ports for data exchange with the host computer, remote shut-down, a three-year warranty and a 60-day Battery Pre-Failure Warranty.



T1000 G2 and T1500 G2

1. LED display
2. Battery Compartment

Models

HP T1000 UPS NA	AF403A
HP T1000 UPS JPN/TWN	AF404A
HP T1000 UPS INTL	AF405A
HP T1500 UPS JPN/TWN	AF407A
HP T1500 UPS INTL	AF408A

Overview

Kit Contents - UPS T1000 G2

- HP UPS T1000 G2
- Power Management Software CD
- Power Products Documentation CD
- 6' (1.83 Meters) UPS to computer serial interface cable
- 6' (1.83 Meters) UPS to computer USB interface cable

NOTE: The International model includes 2 IEC to IEC power cords in addition to the above.

Kit Contents - UPS T1500 G2

- HP UPS T1500 G2
- Power Management Software CD
- Power Products Documentation CD
- 6' (1.83 Meters) UPS to computer serial interface cable
- 6' (1.83 Meters) UPS to computer USB interface cable

NOTE: The International model includes 2 IEC to IEC power cords in addition to the above.

Product Highlights

NOTE: For a brief, printer friendly data sheet that describes this product and informs you of the essential capabilities and specifications, please visit: http://h71028.www7.hp.com/ERC/downloads/4AA0-6982ENW.pdf.

Key Features	UPS T1000 G2 and T1500 G2	• Manageability through USB port. • Ease of configuration via enhanced front panel display. • Intelligent manageability with bundled Power Management software. • Long-term battery reliability with Enhanced Battery Management. • Hot-Swappable battery. • Enhanced system flexibility with independently controllable load segment. • Backed by a three-year warranty, with the first year including parts and labor and a 60-day HP Battery Pre-Failure Warranty. In North America, it is covered by an additional $250,000 load protection guarantee. NOTE: Certain restrictions and exclusions apply. Consult the HP Computer Support Center for details.
Easy Configuration via Enhanced Front Panel Display		Please see the line art drawing previously shown to identify the front panel with noted button functionality.
Investment Protection with Enhanced Battery Management		HP UPSs incorporate Enhanced Battery Management; an exclusive, patented technology that doubles battery service life, optimizes battery recharge time, and provides advance notice of pending battery failure. With Enhanced battery Management, you have a lower overall cost of ownership and receive the best in the industry protection for your critical equipment.
Intelligent Manageability		HP UPSs ship with HP Power Manager management software, which enables you to monitor and control HP UPSs locally or remotely. This software is a versatile, fully configurable, alert response tool that gives system administrators a full overview of the network's conditions. It enables you to monitor system status and power conditions, configure shut down timing, customize alert messages, and perform UPS diagnostic checks quickly and easily.
Ease of Maintenance with Hot-Swappable Battery		HP UPSs are designed with hot-swappable batteries. With simple access through the front panel. Users can safely install a new battery without ever powering down connected computer equipment.
Compatibility		Compatible with all HP computer systems and servers ranging from individual workstations to distributed enterprise and other HP equipment (in tower form factor).
HP Quality		HP hardware qualification is the toughest in the industry. Extensive evaluation, testing, product improvement, and an unsurpassed warranty guarantee the highest level of system protection, electrical performance, product quality and compatibility.

Product Highlights

Warranty

HP UPSs are covered by a three-year warranty, with the first year including parts and labor. Also, standard on all HP UPS units is our exclusive 60-day Battery Pre-Failure Warranty, which extends the advantage of a HP three-year, limited warranty by applying it to the battery before it actually fails. This warranty is offered worldwide. Specifically, the Pre-Failure Battery Warranty ensures that when customers receive notification from HP Power Management Software that the battery may fail, the battery is replaced free of charge under the warranty.

NOTE: $250,000 Computer/Load Protection Guarantee is also provided (applicable in North America only).

HP Care Pack Installation

Care Pack services provide a range of life cycle support options that let you choose the service levels that meet your business requirements, from basic to mission-critical.

A full range of HP Care Pack hardware and software services are available including:

- Installation and start up
- Education courses
- Extended onsite hardware coverage hours from same business day 13 hours, 5 day to 24 hours, 7 days call window with options including 4 hour response or 6-hour Call To Repair
- Comprehensive range of software technical support for Microsoft, Linux, ProLiant Essentials and VMware-based IT solutions helping to deliver high level of application availability. Response times range from 30 mins for critical problems to 2 hours.
- System Management, Performance Services and Mission Critical Support Solution.

NOTE: For more information on HP Care Pack services, contact any of our worldwide sales offices, resellers or visit our worldwide website at: http://www.hp.com/hps/carepack
NOTE: For more complete information on HP Services offerings, customers and resellers, please visit is at: http://www.hp.com/hps
NOTE: Additional information regarding worldwide limited warranty and technical support is available at: http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html
NOTE: For additional information on Server Services, Rack and Power Options, please visit: http://h20219.www2.hp.com/services/cache/111072-0-0-225-121.html
NOTE: The information contained herein is subject to change without notice and is provided "as is" without warranty of any kind.
NOTE: The warranties for HP products and services are set forth in the express limited warranty statements accompanying such products and services.

Warranty Upgrade Options

- Response – Upgrade on-site response from next business day to same day 4-hours
- Coverage – Extend hours of coverage from 5 days x 9 hours to 7 days x 24 hours
- Duration – Select duration of coverage for a minimum period of 1 year or multiple years

HP Care Pack Information For additional HP Care Pack (hardware & software) information, as well as orderable part numbers, please refer to the URL listed below:
http://h18005.www1.hp.com/services/carepaq/index.html

Related Options

Service & Support (Care Pack)	Hardware Installation (Electronic)	U4690E

UPS T1000 G2 Specifications

Low-Voltage Models T1000 G2 AF403A (NA) AF404A (JPN/TWN)	Unit Dimensions (WxHxD)	10.25 x 6.75 x 14 (inch) 260.35 x 171.45 x 355.6 (mm)
	Shipping Dimensions	17.44 x 11.31 x 14.50 (inch) 442.98 x 287.27 x 368.3 (mm)
	Unit Weight	36 lbs (16.33kg)
	Shipping Weight	41 lbs (18.60 kg)
	T1000G2, NA (AF403A)	
	Operating Voltage Settings	120V
	Power Out (VA/Watts)	1000/650
	Input Connection	5-15P (attached cord)
	Output Connection	(8) 5-15R
	Load Segments	1
	NOTE: Part Number AF403A is user selectable for 100V, 110V, or 120V via dip switch setting on the back of the unit.	
	T1000 G2, JPN/TWN (AF404A)	
	Operating Voltage Settings	100V, 110V
	Power Out (VA/Watts)	1000/650
	Input Connection	5-15P (attached cord)
	Output Connection	(8) 5-15R
	Load Segments	1
	NOTE: Part Number AF404A is user selectable for 100V, 110V, or 120V via dip switch setting on the back of the unit.	
High-Voltage Models T1000 G2 AF405A (INTL)	T1000 G2, INTL (AF405A)	
	Operating Voltage Settings	230V
	Power Out (VA/Watts)	1000/650
	Input Connection	IEC 320 C14 input connector
	Output Connection	(8) IEC 320 C13
	Load Segments	1
	NOTE: Part Number AF405A is user selectable for 220V, 230V, or 240V via dip switch setting on the back of the unit.	

Technical Specifications

UPS T1500 G2 Specifications

Low-Voltage Models T1500 G2 AF407A (JPN/TWN)	Unit Dimensions (WxHxD)	10.25 x 6.75 x 14 (inch) 260.35 x 171.45 x 355.6 (mm)
	Shipping Dimensions	17.44 x 11.31 x 14.50 (inch) 442.98 x 287.27 x 368.3 (mm)
	Unit Weight	45 lbs (20.41kg)
	Shipping Weight	50 lbs (22.68 kg)
	T1000 G2, JPN/TWN (AF407A)	
	Operating Voltage Settings	100V
	Power Out (VA/Watts)	1500/900
	Input Connection	Attached 6' power cord with NEMA 5-20P
	Output Connection	(8) 5-15R
	Load Segments	1
	NOTE: Part Number AF407A is user selectable for 100V, 110V, or 120V via dip switch setting on the back of the unit.	
High-Voltage Models T1500 G2 AF408A (INTL)	T1500 G2, INTL (AF408A)	
	Operating Voltage Settings	230V
	Power Out (VA/Watts)	1500/900
	Input Connection	IEC 320 C14 input connector
	Output Connection	(8) IEC 320 C13
	Load Segments	1
	NOTE: Part Number AF408A is user selectable for 220V, 230V, or 240V via dip switch setting on the back of the unit.	

HP UPS T1000, T1500 G2 Models Specifications

Electrical Input	Voltage Range	100V, 120V, 208V, and 230V models
	Frequency	See Model Specifications for nominal and user selectable voltage settings
	Connections	50/60 Hz
	Online Efficiency	See Model Selection Matrix 95%
	Surge Suppression	High Energy 6500A peak
Electrical Output	Online Regulation	-30% to +20% of nominal voltage
	On battery Regulation	±5% of nominal voltage
	Voltage Wave Form	Sine wave
	Connections	See Model Specifications
	Output Protection	Re-settable circuit protectors (T1500 models only)
Battery	Type	Maintenance-free, sealed, valve-regulated lead acid (VRLA)
	Recharge Time	<4 hours to 90% usable capacity; <24 hours for complete recharge
	Battery String Voltage	T1000 G2: 24V (2x12V) T1500 G2: 36V (3X12V)

Technical Specifications

	Battery Ampere Hour (ah)	T1000 G2: 9ah T1500 G2: 9ah
Communications	Serial Ports	Standard communication port (ships with 6' Serial communication cable)
	USB Port	Standard communication port (ships with 6' USB communication cable)

	LED Indicators	• Power On/Standby button
		• Power LED
		• Voltage correction LED
		• Output Load Level LED
		  ○ Red - Maximum load
		  ○ Amber - Medium load
		  ○ Green - light load
		• Battery Charge LED
		  ○ Power LED is Green
		  ▪ Red-The batteries are beginning to charge.
		  ▪ Amber-The batteries are midway through charging.
		  ▪ Green-The batteries are fully charged.
		  ○ Power LED is flashing green
		  ▪ Red-The batteries have a low level of energy.
		  ▪ Amber-The batteries have a medium amount of energy.
		  ▪ Green-The batteries have a high amount of energy.
		• Battery Warning LED
		• Mute/Test Button

Environmental and Safety	Operating Temperature	50° to 104° F (10° to 40° C)
	Transit and Storage Temperature	-13° to 131° F (-25° to 55° C)
	Humidity (Operation)	20% to 80% (non-condensing)
	Humidity (Non-operating)	5% to 95%
	Operating Altitude	Up to 6,600 ft (2000 m) above sea level
	Transit and Storage Altitude	Up to 49,000 ft (15,000 m) above sea level
	Audible Noise	Less than 53 dBA max
	Safety Markings	Please see table below
	EMC Markings	Please see table below
	Emissions	FCC CFR 47, Part 15 Class A, EN50091-2
	Immunity	IEC 801-2, IEC 801-3, IEC 801-4, IEC 801-5
	Surge Suppression	Conforms to IEEE 587B and ANSI C62.41

Safety Markings

Certifications	Mark on Products	T1000G2 UPS NA	T1000G2 UPS JPN	T1000G2 UPS INTL	T1500G2 UPS NA	T1500G2 UPS JPN	T1500G2 UPS INTL
Product Safety Requirements and Approvals							
EN62040-1-1 (IEC 62040-1-1) EN60950-1 (IEC 60950-1)	CE logo	N	N	Y	N	N	Y
CB Scheme / report	None	Y	Y	Y	Y	Y	Y
USA UL 1778 3rd Ed. UL 60950:2003	TUV US Mark	Y			Y		
CANADA CAN/CSA-C22.2 No. 60950-00 CSA C22.2 No. 107.3	TUV C Mark	Y			Y		
European Approval	TUV GS Mark			Y			Y
Australian Approval	Per Glen L. No mark required. Only country deviations needed in CB report.			Y			Y
Japan Approval	S Mark		Y			Y	
Argentina (IRAM)	S Mark			Y			Y
NOM	NOM-NYCE logo	Y			Y		
Russia (GOST)	GOST logo			Y			Y
Korea (EK)	EK marking, file # & stats			Y			Y
Thailand (TISI)	TISI S Mark			Y			Y

EMC Markings

Certifications	Mark on Products	T1000G2 UPS NA	T1000G2 UPS JPN	T1000G2 UPS INTL	T1500G2 UPS NA	T1500G2 UPS JPN	T1500G2 UPS INTL
EMC Requirements and Approvals							
Class		B	B	B	A	A	A
CISPR Pub 22, B	none	Y		Y	Y		Y
CE Mark Requirements	CE logo			Y			Y
FCC	FCC logo	Y			Label on UPS		
Canadian Approval (ICES)	ICES Label on UPS	Y			Y		
Australian (ACA)	C-Tick & mfgs supl			Y			Y
Japan Approval (VCCI)	VCCI logo		Y			VCCI-A	
Taiwan (BSMI)	BSMI Marking with ID #		Y	Y		Y	Y

Estimated Backup Times Chart (In Minutes)

T1000 G2		
Load, percent	Load, Watts	Estimated battery runtime at 100% battery charge
20%	130	45 minutes
50%	325	15 minutes
80%	520	6 minutes
100%	650	4 minutes

Technical Specifications

T1500 G2		
Load, percent	Load, Watts	Estimated battery runtime at 100% battery charge
20%	210	45 minutes
50%	525	15 minutes
80%	840	6 minutes
100%	1050	4 minutes

NOTE: Backup times are estimated for typical applications. Actual performance will depend on load and battery conditions.

Environment-friendly Products and Approach

End-of-life Management and Recycling

Hewlett-Packard offers end-of-life HP product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to http://www.hp.com/go/green. To recycle your product, please go to: http://www.hp.com/go/green or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: http://www.hp.com/go/green. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.

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